

**Don't Keep it Bottled Up: An Analysis of Black Glass Wine**

**Bottles at Historic Huguenot Street New Paltz, NY**

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State University of New York at New Paltz Anthropology Thesis

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## **Abstract**

Historic Huguenot Street in New Paltz New York has been a site of human activity stretching back well over nine thousand years, including the Native American Munsee speakers and the French Huguenots who settled New Paltz in 1677. Archaeological excavations over the past twenty years have helped to uncover the rich prehistory and history at the site. In this paper I introduce and examine seventeenth century English black glass wine bottles, as objects of analysis that help illuminate the material culture and foodways of these early Huguenots. Furthermore, I demonstrate how an analysis of this material culture and their foodways, excavated from Historic Huguenot Street builds a data set on the social and economic lives of the Huguenots that the written record does not. This paper will draw heavily from the theoretical framework of Louis Binford's trinomic categorization of artifacts into the ideotechnic, sociotechnic and technomic spheres to analyze the artifacts in question and gain insight on the interaction between the Huguenots and the world around them.

**Keywords:** Anthropology, Archaeology, Historical Archaeology, Glass studies, Wine bottles, Seventeenth century, Material culture, Foodways, History, Colonial America, Huguenot

## **Introduction**

Historic Huguenot Street in New Paltz New York has been a site of human activity stretching back well over nine thousand years, including the Native American Munsee speakers and the French Huguenots who settled New Paltz in 1677. Archaeological excavations over the past twenty years have helped to uncover the rich prehistory and history at the site. In this paper I will focus on the historic period beginning with, seventeenth century English black glass wine bottles as objects of analysis that help illuminate the material culture and foodways of these

early Huguenots. Furthermore, I demonstrate how the results of these analyses provides information on the socio-cultural lives of the Huguenots that the written record does not.

In order to understand what we can learn from these seventeenth century black wine bottles this paper relies heavily on recent archaeological work done in the field of “foodways.” Foodways, defined by Karen Metheny (2013:1) is “the range of cultural, social, and economic practices shared by a group in the conceptualization, production, and consumption of food.” As Metheny (2013:1) argues, scholars should not study food solely from a viewpoint of subsistence, as food related activities can provide a wealth of information on social and economic life including “hierarchal relationships” and trade patterns. In conjunction with foodways, this paper utilizes the trinomic categorization of artifacts into the ideotechnic, sociotechnic and technomic spheres to analyze the artifacts in question and gain insight on the interaction between the Huguenots and the world around them (Binford, 1962). Binford in his article “Archeology as Anthropology” posited that in breaking up material culture into the above three classes which view material culture in the ideological, social and functional realms archaeologists can draw conclusions on “the processes of change (in a culture) within each class” of artifacts (Binford, 1962).

Utilizing these two theoretical frameworks, this paper will address the following questions which are aimed towards both quantitative and qualitative analysis. What are the date ranges and origins of the bottles? Why, does the conduction of a minimum number of vessels analysis, result in so few black wine bottles on the site? What do these black glass wine bottles illuminate about the lifeways of New Paltz’ original Huguenot families during their first years of settlement, and colonial life in the Hudson Valley at large? What were the social and functional uses of these historical vessels and any other forms of material culture associated with them?

## Theory

In order to most effectively gain social and economic information on the lives of these early Huguenots the analysis of black wine bottles is grounded in two theories. The first is Lewis Binford's theory of artifact classification into the three categories of technomic, ideotechnic and sociotechnic. Secondly, this paper utilizes foodways which brings food/drink related artifacts into the cultural-social and economic realms, providing insight into how people cognitively compartmentalize ideas about food and how it relates to their role in society. With a socio-cultural lens on food related artifacts questions begin to arise on how certain artifacts sustain and impact social and economic livelihood (Mullins, 2011:138). Binford's three-part system of classification emphasizing culture change via how artifacts change in the spheres they're being used in, meshes well with foodways. With foodways focus of analysis on food/drink related material artifacts outside of the purely functional realm provides these two theories provide a fuller picture than a simple quantitative analysis would. Effectively by analyzing processes of change through the foodways lens which gets at the question of why certain subsistence items are consumed in the manner they are and what we can learn about social and economic life from this, the fine details of life that consumption offers can be teased out.

### *Binford's Three Categories*

In 1962 Lewis Binford sought to bridge archaeology with anthropology's goal of "explaining cultural similarities and differences" (Binford, 1962:217). To help facilitate archaeology's transition into a comparative science more closely aligned with cultural anthropology's emphasis on cultural comparison. Binford (1962:219) argues that the first class of

artifacts that archaeologists must sort out are those of technomic artifacts, meaning artifacts which have “their primary functional context in coping directly with the physical environment.” As such technomic artifacts when analyzed by the archaeologist provide solely functional information, such as a steel hatchet with no stylistic markings. With artifacts separated into the technomic realm, the archaeologist can now focus their attention onto artifacts that fall outside the realm of simple interaction with the environment, grouping artifacts into both the sociotechnic and ideotechnic realms. Artifacts in the sociotechnic realm provide “extra-somatic” information on the individual it belonged to, allowing the archaeologist to deduce one’s social status (Binford, 1962:219). Staying with the example of a hatchet, an artifact in the sociotechnic realm could be a hatchet with an engraving of the owners name in it, signifying that they had some form of disposable income which they could use to add their name to the item, indicating wealth and quite possibly a high position in their societies social hierarchy. Lastly, artifacts which the archaeologist classifies as ideotechnic yield information on the ideological/worldview of a said society, and “are the items which signify and symbolize the ideological rationalizations for the social system and further provide the symbolic milieu in which individuals are enculturated” (Binford, 1962:219). Ideotechnic artifacts provide information on the dominant ideologies of a culture and the ways in which the cultures constituents adopt them. Using the hatchet again as our artifactual example, one that exists in the ideotechnic realm, might have a cross on its handle or “clan symbols” (Binford, 1962:220). Once artifacts have been separated into these three categories, archaeologists can analyze processes of change in each group, in turn reflecting broader changes in the culture at large. Changes in the technomic realm relate to environmental changes, the sociotechnic realm relates to changes in the social structure of a culture, such as “between-group competition” and

ideotechnic changes relate to the interaction between ideology and “material symbolism” (Binford, 1962:220).

### *Consumption Beyond Subsistence*

Employing foodways as a theoretical framework, the archaeologist can learn information on topics such as why people consume what they do, what this means for their society and how patterns of consumption influence a societies social hierarchy and trade patterns. I have decided to use the term “foodways” in this paper to describe my theoretical framework, as this paper focuses on glass wine bottles and alcohol consumption. However, it may be helpful to note that foodways make up only a segment of one’s larger worldview. While the use of foodways as a framework of study in anthropology is a relatively recent phenomenon, with most food studies taking a cultural ecological approach, it is undoubtedly a framework of great value (Steward, 1955; White, 1959). Emphasizing foodways ability to drastically change how we view our conception of food as merely something functional Mary Douglas asked if our entire relationship with food changed, “How would we be able to say all of the things we want to say, even just to the members of our families, about different kinds of events and occasions and possibilities if we did not make any difference between breakfast and lunch and dinner” (Quote by Mary Douglas in her contributions to Hargreaves Heap, 1992:23). Human’s relationships to what they consume reflects their worldview at large, making objects such as colonial wine bottles excellent sources of data to find out much more than what people simply drank.

Karen Metheny, a leader in foodways studies, has brought attention to cultural practices regarding food and drink as valuable units of analysis. For example, Metheny (2013:147) writes that the action of sharing and eating food with others “create and affirm the social and economic bonds between individuals and groups that are central to the formation and maintenance of communities” providing insight into a culture’s social and economic organization. In the now defunct mining town of Helvetia, Pennsylvania workers coming from mostly European immigrant went on strike in 1933 to protest unfair working conditions. Those who did not go on strike however would often have their “dinner pails” stolen from them and dumped out by wives of striking miners as an act “of resistance to mine owners, programs of corporate paternalism, and the institutionalized practice of working class exploitation” (Metheny, 2013:150; Saitta, Walker and Reckner 2005). Thus, the miner’s dinner pail, while also serving a functional role in carrying the miners lunch became an object that provides insight into class struggle in American mining towns.

Similarly, Lidia Marte (2007:265) created the idea of foodmaps as a tool to elicit information on how Female Dominican immigrants in New York City use food “as landmarks to navigate their local places, to reimagine their cultural memory and sense of home, and as narrative sites to share their migrant histories with second and third generations” Marte (2007:274). had her informants draw a series of maps, including their pre-and post-migrant kitchens and neighborhoods. In doing so Marte found that many of the women drew their post-migration kitchens as “sparser” and more confined, then their pre-immigration kitchens, which she postulates is a representation of the sense of marginalization and confinement these women feel as immigrants.

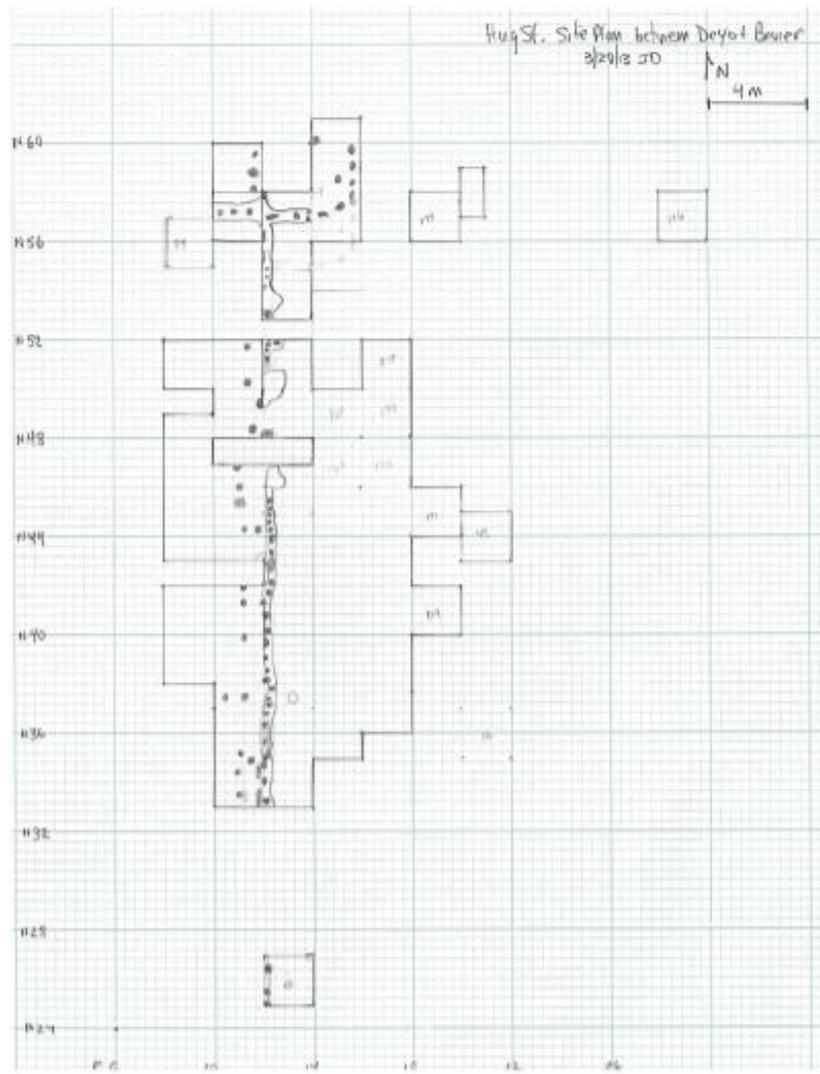
## Background

The Huguenots, a French Protestant group of Calvinists, trace their origins to the early sixteenth century in France, where living in a predominantly Catholic country they were often subject to religious persecution. In 1598 King Henry IV signed the Edict of Nantes allowing the Huguenots the right to practice Calvinism in France. However, this did not stop violence and further persecution against the Huguenots from France's Catholic citizens, creating a mass exodus to European countries with larger percentages of Protestants such as Belgium and Germany (Lachenicht, 2007). The genesis of the Huguenots in New Paltz as such comes from the Huguenot families who once finding refuge "in *die Pfalz*, a Protestant region in present-day southwest Germany" fled to what was then New Netherlands, purchasing 40,000 acres of land from the Munsee Native Americans and started to build the first homes on what is now Historic Huguenot Street in 1678 (<https://www.huguenotstreet.org/our-history>). The stone buildings that still stand today in Huguenot Street are in fact the second generation of Huguenot structures, which replaced the post in ground houses that colonial settlers often built when first arriving (Huey, 1987).

Professor Joseph Diamond, running an archaeological field school at Historic Huguenot Street, has uncovered a plethora of information on life on early Huguenot life in New Paltz which he plans to publish soon. Diamond and his students have found evidence of site activity on Huguenot Street dating back to the beginning of the Archaic Period (7000 B.C.) Almost immediately after purchasing the land that is now Historic Huguenot Street, the twelve families built a stockade, of which excavations at the site from the summer of 2004 have uncovered the eastern palisade of. This is evidenced by a series of north-south running post molds (**Fig. 1**). In 2018 the western wall of the original stockade built by the Huguenots was uncovered, evidenced by ground penetrating radar and further excavation which revealed tree trunk size post molds

[\(https://sites.newpaltz.edu/news/2018/08/ground-penetrating-radar-enables-new-archaeological-discovery-at-historic-huguenot-street/\)](https://sites.newpaltz.edu/news/2018/08/ground-penetrating-radar-enables-new-archaeological-discovery-at-historic-huguenot-street/).

Excavations on the lawn in between the current Bevier-Elting and Deyo houses have uncovered invaluable information regarding the first structures the early Huguenots set up in 1677. Furthermore, with the location of the western palisade of the stockade last year, we have now been able to construct the horizontal extremities of early Huguenot settlement. Much of the lawn excavated is within the historical confines of the Huguenot stockade, making the site domestic. The eastern wall of the palisade cuts through the postmolds of a seventeenth century earthfast house, signifying that these Huguenots originally settled into earthfast houses and then very quickly switched to a fortified style of living. The majority of black glass sherds come from inside the confines of the stockade showing an east-west trend from the earthfast house westward.



**Figure 1: Plan View of the lawn between Bevier-Elting and Deyo Halls.**

*Black Glass Wine Bottles*

Concerning the glass wine bottles this paper analyzes there have been no intact vessels found, but current laboratory efforts are underway to mend a complete vessel. The glass bottles are all English in origin, supporting theories of Huguenot trade with early British settlers (see

**Discussion**) and come in two stylistic varieties. The first one is known as an onion shaped bottle, with a short neck and squat body, and the second is called a “shaft and globe” bottle which is characterized by a much longer neck than onion bottles and a round body (**fig. 3**). Evidence supporting the origins of the bottles comes from previous archaeological research conducted on similar colonial archaeology sites and extant collections. In the Jamestown Rediscovery project for example, “archaeologists found 10 onion-shaped glass bottles made in England between 1680 and 1700” (<https://historicjamestowne.org/selected-artifacts/nicholson-bottles/>). Furthermore, black glass shaft and globe bottles were introduced in England around 1630, with the Belgian version of the vessel that had a yellower-sandy color of which none have been found on Huguenot Street (Jeffries et al, 2015; Van Den Bossche, 2001).

Within the broader field of glassmaking, black glass bottles represent the start of a manufacturing revolution, providing many enhancements in production that would be adopted throughout Europe and the colonies (Veit and Huey, 2014:57).<sup>1</sup> With thicker walls, a lesser chance of leaking and better protection of the contents inside the vessel they truly changed alcohol consumption (Hancock, 2009:367) (**Fig. 3**). Prior to the use of black glass bottles, the usage of lighter colored glass often led to the fermentation and spoiling of the alcohol inside the bottle. While the exact genesis of these bottles is hard to pinpoint, McKearin et. al, (1978:21) postulate that they appear in England circa 1630, with definite *terminus post-quem*'s existing for these around the 1650's provided via “seals with crests, initials, names, and dates.” Van Den Bossche (2001) further describes a second iteration of the shaft and globe bottle for example that included family crests and symbols, known as “the gentleman’s bottle” that appeared in the 1660's.

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<sup>1</sup> See figure 2 for an “anatomical” view of a black glass wine bottle.



Figure 2: Anatomy of a wine bottle.

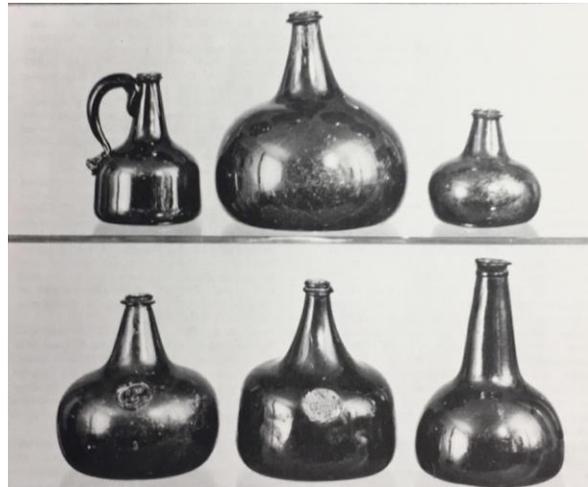


Figure 3: A variety of English black glass bottles. Shaft and globe, top center and bottom right. Onion bottom left and middle.

McKearin, Helen, and Kenneth M. Wilson. 1978. *American bottles & flasks and their ancestry*. New York: Crown Publishers.

Onion and shaft and globe bottles exhibit a vast range of morphological characteristics within their said style depending on the specific temporal period of production for the bottle. McKearin and Wilson (1978) have created four distinct typologies of seventeenth century bottles (Type 1, 1a, 2, 3) that are useful in analyzing and dating sherds excavated. Type I, which is the only form of shaft and globe bottles, dating from 1630-1650 has a neck longer than its “small globular body” whereas type 1a (c. 1660-1665) and 2 (c. 1660-1690) have a more “cuplike” body, with type 2 having a shorter, squatter neck than type 1a. Lastly, type 3 (c. 1680-1730), while similar in overall stature to type 2 has a much rounder, curved kick up than all its predecessors, which archaeologists often use to define it against the former versions of black glass bottles.

Push up and empontilling techniques similarly vary across black glass bottles and furthermore leave a plethora of evidence concerning manufacturing processes. Since all of the vessels in question were hand blown, all bases found exhibit an inward curve which was most likely created to help the bottle stand upright by eliminating rough extra glass on the bottles base as a result of the empontilling process (Boow, 1991).

### *Seventeenth Century Drinking Ware on Historic Huguenot Street*

While this papers focus remains on the black glass wine vessels of Historic Huguenot Street, to gain a fuller picture of their significance, it is worthwhile to spend some time discussing the other varieties of seventeenth century drinking ware that appear and were used alongside these vessels. The wine bottles were used mainly for decanting, with the Huguenots decanting most of the alcohol from the onion and shaft and globe bottles into two types of stonewares to drink out of. The first one of these are *bartmannkrug* jugs, (**fig. 4**) characterized by a bearded man decorated on the neck of the vessel. The *bartmannkrug* jugs were produced all over Germany, with a heavy concentration of production occurring in the Southwest of the country, namely in the city of Cologne (Gaimster, 1997). After fleeing France and prior to settling in New Amsterdam, the Huguenot families of New Paltz lived in the southwest of Germany, specifically in the Rhineland-Palatinate that borders the city of Cologne. While German Stoneware is archaeologically one of the most widely distributed forms of ceramic vessel across the world, the presence of *bartmannkrug* jugs specifically on Huguenot Street, reinforces the narrative of the Huguenots exodus throughout Europe (Gaimster, 1997:105).

The second stoneware that has been found in similar archaeological contexts as the black glass is westerwald stoneware (**fig. 5**). Similar to the *bartmannkrug*, westerwald stoneware's historical area of production is in the Rhineland-Palatinate which contains the Westerwald

mountain range of which the ceramic gets its name (Kiser, 2006). These vessels provide both a sociotechnic and ideotechnic outlook on Huguenot life as evidenced by their ties to English royalty during the turn of the eighteenth century.



**Figure 4: Bartmannkrug jugs.**

Noël Hume, Ivor. 2001. *If these pots could talk: collecting 2,000 years of British household pottery.* Milwaukee, WI: Chipstone Foundation.



**Figure 5: Westerwald Stoneware.**

Noël Hume, Ivor. 2001. *If these pots could talk: collecting 2,000 years of British household pottery.* Milwaukee, WI: Chipstone Foundation.

### Methodology

Diamond provided all artifactual data for the project. After discussion we both agreed that it would be fruitful to look at artifacts from 2000 to 2018 excavation seasons.<sup>2</sup> The first step in the research process consisted of going through all of the hard copy artifact reports on glass to

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<sup>2</sup> This in total led to eighteen separate years of analysis as in 2007 the field school took the summer off.

eliminate all unnecessary data that would hinder locating artifacts in storage. Since each report was written by different field school crews, though the artifact classification remained pretty consistent throughout all eighteen years, sometimes alternative descriptors were found used in certain years that were not present in other years, requiring the standardization of said data. This was done through locating all seventeenth century wine bottle fragments excavated from 2000-2018 in the available reports, pulling all provenience information from the artifacts, and putting all of this information into an “Excel spreadsheet.”

In order to reconstruct site activity and vessel function, I calculated the minimum number of vessels analysis (MNV). An MNV analysis provides greater analytical insight than a simpler quantification of sherds presents. This is because the MNV analysis provides insight as to the minimum number of vessels that may have been in use on a given archaeological site based upon the number of unique sherds excavated that when put in relation to other sherds constitute a vessel. In the words of Barbara Voss (2002:661), when conducting any study concerned with the reconstruction of activity patterns one should remember that sherds were not used by anyone, but rather whole vessels were. With the goal of reconstructing artifact functionality in the past, so the analysis must curtail itself towards recreating this past as approximately as possible. The MNV does not account for unidentifiable sherds which can only offer quantitative data. Instead, an MNV looks at unique fragments such as rim sherds, base sherds and body sherds, the appearance of which signifies the presence of at least one whole vessel from the site (Voss, 2010:2). It is in the process of looking for duplication of sherds that an MNV analysis can be successful. Just as with anatomy, certain elements of glass vessels only appear singularly, just as humans have one skull. Thus, when conducting an MNV analysis, the archaeologist wants to look for sherds which affirm the existence of individual unique vessels, such as bottle lips and kick up marks (**Fig. 6 and 7**).

While the seventeenth century bottles analyzed were used within the temporal period of the first couple years of Huguenot settlement, they still needed to be dated in order to separate them from the complete glass assemblage of Huguenot Street. The complete glass assemblage contains many eighteenth-century glass vessels that if not analyzed closely enough could have been lumped together with the earlier black glass thus completely skewing the MNV analysis. To date artifacts, various stylistic elements, such as body shape, neck length and pontil marks if found, were assessed and then cross-referenced with extant typological catalogues. These catalogues, compiled by experts in the field of glass studies provided the necessary historical contexts concerning the glass wine bottles that allowed analysis to proceed (Jones, 1971; Veit et. *al*, 2014).



**Figure 6: Two finishes, right is from an onion bottle, the left is from a shaft and globe bottle.**



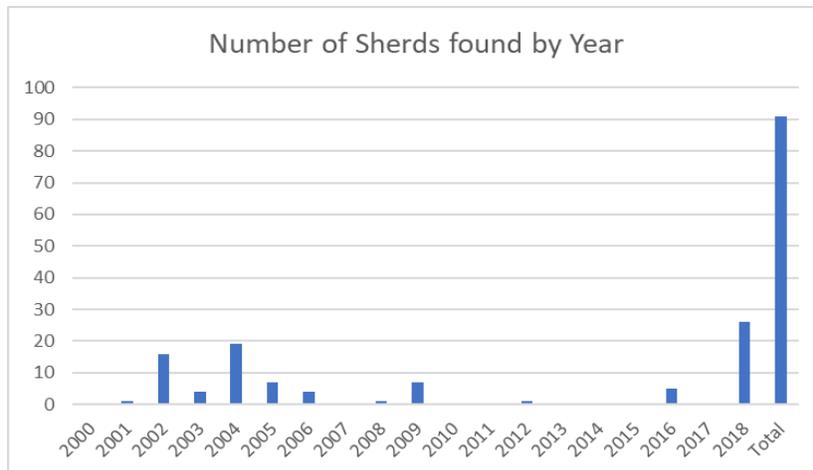
**Figure 7: Kick up on the base of an onion bottle.**

### Data

After pulling and separating all of the black glass sherds from the glass assemblage as a whole, ninety-one individual sherds became available for analysis (**Fig. 8**). The vast majority of these sherds were from inside the boundaries of the palisade walls, with the other sherds appearing around the 1677 earthfast house (**See Discussion for more**). Many of the sherds analyzed were

either too damaged to discern what specific part of the vessel they came from, or existed as body sherds which did not help in singling out individual vessels and thus were not factored into the MNV.

The Minimum Number of Vessels Analysis found that all of the black glass recovered so far represents at the very least five whole vessels. Three of them being onion bottles and the other two being of the shaft and globe style. The earliest sherds were excavated in 2018, unit 255, and when mended together formed part of the body of a shaft and globe bottle with a date range of 1640-1660 representative of the type I black glass bottles that McKearin and Wilson (1978) characterize by a long neck in proportion to its “small globular body.”



**Figure 8: Number of Black Glass Sherds found by year**

### Discussion

With all these seventeenth century bottles coming from Europe, there is still no evidence found to date of any glassblowing operation occurring on Huguenot Street (McKearin and Wilson, 1978). The Huguenots in New Paltz settled in between the first and second glassblowing

productions in Colonial America. The first one being the Jamestowne Glasshouse of 1608 and the second one being the Wistarburgh glass factories in New York and Pennsylvania in 1730's. With the Huguenots in the New World during the start of domestic glass production, questions of economy and social relations arise (Palmer, 1976). Why did these families not elect to make their own vessels for example? To answer this question by stating that the Huguenots simply did not possess the technological means to fire their own glass vessels would be incorrect as Jean Farrelly (2014:48) and his team excavated a seventeenth century glassmaking furnace in Shinrone Offaly County Ireland that was in fact owned and operated by a Huguenot family who had migrated to Ireland from Lorraine, France. As Farrelly's historical research would uncover, Huguenot refugees from France, being Protestant, made up a large part of the migrants who settled in Ireland during Protestant England's colonization of the Island (Huguenot Society of Great Britain & Ireland, 2002). Perhaps the decision to not create a permanent glassblowing operation reflects a possible early Huguenot mindset of surviving and securing their livelihoods in the New Worlds as I will discuss in the subsequent paragraphs.

The findings of the data analysis align with the broader time period and social situation of these early Huguenots. Firstly, of note is the fact that all eight-three sherds were classified into the technomic realms. None bore any stylistic markings or religious symbolism that provided information concerning early Huguenot social hierarchy or ideology. However, when we view this in terms of culture change, it can be deduced that these early Huguenot families arrived in New Amsterdam with an emphasis on survival and subsistence. Considering that even though the technology for decorating glass bottles had existed in Europe since the latter half of the sixteenth century, this lack of emphasis on style in bottle ownership could reflect not just the simple lives of the early Huguenots, but also of the British settlers whom the Huguenots most likely acquired

these bottles from (Jones, 1986:88). These bottles, English in origin, were most likely obtained through the Huguenots trading with the British settlers in nearby Hurley, NY (Diamond personal communication). The town itself was settled by the English in 1664, abandoned due to Native American attacks, and later resettled in 1669, eight years before the Huguenots arrived, with its historical boundaries including the village of current day New Paltz (Lyke, 2001).

### *The Absence of Tavern Culture*

With a minimum number of vessels=5 there is no strong evidence of any type of tavern culture existing in these formative years of settlement, which sets early Huguenot Street apart from other earlier colonial settlements (Struzinski, 2002). The colonial tavern had a multitude of functions including entertainment, socializing and of much important was rest for travelers (Struzinski, 2002:29). With the burgeoning colonial economy beginning to take hold in the mid seventeenth century, travel between colonial territories became quite common, creating linkages between settlements, with taverns often facilitating the successful travel from one settlement to another. While drunken feuds would lead many to denounce the existence of taverns, provincial officials saw them necessary nonetheless to uphold social connections and house travelers (Conroy, 1995:19).

The presence of a tavern will show up archaeologically through the presence of hundreds or even thousands of glass sherds associated with drinking vessels as well as ceramic vessels that are associated with serving drink, such as redware. Kathleen Bragdon (1981) created a standard set of archaeological criteria to determine if a site was in fact a seventeenth century tavern. Bragdon writes

“The tavern assemblage is characterized by: 1) a large number of vessels; 2) a large percentage of drinking vessels in relation to the total ceramic sub-assemblage; 3) a large percentage of those ceramic types most often found in the form of drinking vessels; 4) large numbers of wineglasses; 5) specialized glassware; 6) large numbers of pipestems” (Bragdon, 1981:35).

In accordance with Bragdon’s criteria, the artifactual assemblages on Huguenot Street exhibits more food serving related ceramics than drinking ceramics, a relatively small number of vessels, very few identifiable wineglasses and no specialized glassware for drinking until the nineteenth century with the appearance of tumblers on the site. Similarly, Bragdon (1981:35) cites the presence of “slip decorated redware” as suggestive of tavern culture as the redwares decorations eludes to a sense of respect for the customer. From this, the assemblage on Huguenot Street more easily falls into the domestic site, given the presence of very few wine stems, and pipe stem fragments numbering in the hundreds rather than thousands, which Bragdon (1981:36) identified as another diagnostic feature of tavern sites. The Jamestown shields tavern for example in the early eighteenth century had 1,256 sherds of bottle glass based on stratigraphic analysis, and a further 5,910 sherds in the transitional stratigraphy leading to the mid eighteenth century.

#### *Artifact Provenience*

Huguenot Streets classification as a domestic site with inhabitants focused on intragroup life is further reinforced by the archaeological provenience of the seventeenth century glass wine bottles with relation to the structures that the Huguenots built in their first years at the site. Immense similarities between the Huguenot Street earthfast house and earthfast houses recovered in Maine at sites in Premaquid and Arrowsic, help solidify the affirmation that what we have is indeed one of the earliest structures of Huguenot Street (Baker et al, 1992). As aforementioned

excavations have found the black stains of multiple postmolds, many of which had the presence of clay deposits within them. While seemingly insignificant, the clay deposits suggest that the Huguenots followed a fairly standard method of foundation setting for their earthfast houses that was common throughout the New England Colonies. At Premaquid for example, earthfast house “13-A” had a floor that was built with wooden sills into the clay ground (Camp, 1975). This style of vernacular architecture<sup>3</sup>, spanned the northeastern Atlantic border as far as Quebec, where it was extremely popular among the early French colonists and helps demonstrate the Huguenots linkages to their French origins. (Guimont and Beaudet, 1995).

When analyzing the provenience of the black glass sherds, the social life of these early Huguenots becomes even clearer (**Fig. 11**). Firstly, the eastern palisade wall, which cuts through the earthfast house, providing a *terminus post quem* around the late 1680’s, via glass sherds found in it, divides the distribution of black glass sherds on the Bevier-Elting Lawn. The earthfast house, being built most likely a year earlier, with the function of temporary usage, exists just outside the palisade trench and contains what might be considered the start of black glass wine bottle usage on the site. Four sherds of black glass were recovered from the site of the earthfast house at Unit 162. While four sherds may be of minimal usage for analysis, contextually they show that even before the earthfast house was abandoned for the safety of the stockade, social drinking was occurring during the sites first year of occupation by the Huguenots.

Furthermore, the main stockade trench, running northwards, spatially divides the sherds almost perfectly between those inside the palisade and outside. It is of high probability that the sherds located inside the palisade were deposited after its actual construction and do not represent

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<sup>3</sup> Vernacular architecture is defined as using local materials to build structures that embody the values and building traditions of a certain culture. (Glassie, 2000:20).

the inhabitants of the earthfast house depositing the bottles inside the walls of the future palisade. According to Stanley South's (2002:47) Brunswick pattern of refuse, the distribution of refuse at a colonial domestic site will be adjacent to both the entrance and exits of a house. As such, following this pattern, we would expect to see many sherds heavily in at least two areas around the earthfast house. With only four sherds around the earthfast house, there is not enough evidence to conclude that the sherds on the other side of the palisade can be joined with them to create a concentrated area of refuse. While the closet sherds to them found in unit 87, contexts 972 and 979, were only approximately two meters away, the sherds in context 972 were found inside the palisade trench and those in 979 further below those. Thus, the sherds in unit 87 while close in physical proximity to unit 162 cannot be tied to them as they represent a later deposition event, during or after the construction of the palisade trench itself.

All of the other black glass wine sherds excavated at the Bevier-Elting lawn as such come from within the historical boundaries of the palisade. Furthermore, the discrepancy in the total amount of sherds found in the palisade compared to the four found outside is striking. Just on the Bevier-Elting side of the palisade alone there were 36 sherds of black glass recovered, a total of 39.5 percent of the total sample. While nothing can be certain, the lack of parallel horizontal distribution between inside and outside the palisade seems to point to an increase in the social consumption of alcohol once the Huguenots were in the safety of the palisade. Furthermore, the sherds remarkable proximity to the palisade wall, conforms with South's Brunswick pattern of refuse disposal, where looking at the wall as an exit to the palisade the Huguenots seem to have been depositing their trash near the palisade's extremities. One notable find was the sherd found in unit 74 context 675 as the context it was found in had a burnt limestone deposit at its southeast corner. This shows evidence of a more permanent form of domestic settlement associated with the

palisade, as archaeologically burnt limestone can be evidence of attempts of to make lime mortar, to help build more permanent houses inside of the palisade, using the Onondaga limestone quarries of the Hudson Valley as their source (Feldman et al, 1993).

The field school in 2018 found the western wall of the stockade, which runs parallel to the Bevier-Elting lawn extending past the main road allowing for the deduction of the forts horizontal extremities, leading to a more complete picture of black glass provenience on Huguenot Street. While a 100% complete excavation of this side has not been conducted, with excavations occurring only over the last three years, it is of note that 37% of the sherds in the sample come from inside the western stockade boundaries. Units 252 and 253 on the western portion of the palisade (**Fig. 12**) and units 87, 110 and 111 on the eastern half, show a concentration of black glass sherds found both in and around the trench walls of the palisade. While there exist many possible scenarios regarding their provenience, these sherds could possibly reflect episodes of drinking in tandem with the palisade construction, turning the construction itself into a social event. This assessment seems valid based on how much the average seventeenth century individual drank daily, with Jay Anderson (1970) providing a figure of one gallon of ale a day for a typical yeoman farmer of the times. Furthermore, a number of anthropological studies have been dedicated to alcoholic drinking “as a significant force in the construction of the social world” in which social connections are constructed and established through the act of drinking (Dietler, 2006:235; Douglas, 1987). As such, it would be of no surprise to find out that the Huguenots consumed alcohol in the process of in constructing the palisade.

The excavation during summer 2018 was one of the most fruitful to date, for not only were the western extremities of the palisade located, a total of 26 sherds, were found, making up 28.5 percent and 84 percent of sherds in the western palisade. This included the aforementioned shaft

and globe bottle found in unit 255, context 267, which happens to be the oldest bottle excavated from the site dating to around 1650. Furthermore, with a horizontal provenience located inside the palisade boundaries and no bottle fragments being found outside said projected boundaries the argument for an increase in drinking activity with the building of the palisade seems ever more likely. Unit 255 also found bottle fragments going down to its 6<sup>th</sup> context 2688 and found its first sherd in its third context. With a 30-centimeter gap between the first and last sherds found, we might be able deduce that drinking not only occurred within the palisade, but was quite frequent and shows up via the vertical distribution of sherds in multiple units inside the palisade. Arguments could be made against this if evidence was found which indicated that artifact vertical location had been disturbed via centuries of plowing.

#### *Sociotechnic and Ideotechnic Elements of Huguenot Drinking*

While all of the black glass sherds excavated exist solely in the technomic realm, this does not mean that Huguenot drinking life does not contain any artifacts that can be classified in the sociotechnic and ideotechnic realms. As briefly discussed in the section entitled “Seventeenth Century Drinking Ware on Historic Huguenot Street” the Huguenots decanted much of their alcohol in two forms of salt-glazed stonewares, *bartmannkrug* jugs and westerwald stoneware, both of which can be traced back to the Huguenots original area of refuge in the Rhineland-Palantine (Smith, 2008). The sherds of *bartmannkrug* jugs found on Huguenot street, (**fig. 9**) are similar to the full vessel in **figure 3** and most likely originate from a small town named Frechen which borders the city of Cologne, in the vicinity of where the Huguenots settled in Germany (Faulkner, 1985:4). This brings forth questions concerning trade, as the jugs in particular were often traded in the Dutch trading sphere, leading one to surmise if one of the Huguenot families had extensive trade connections or if perhaps these jugs were brought over with the Huguenots.

The westerwald stoneware sherds from Huguenot Street (**fig. 10**) are of immense value in an analysis of drinking in both the ideotechnic and sociotechnic realms. Drawing attention to the second sherd from the right on the top row one will notice the lower portion of an “R.” As Ivor Noël Hume (1970:282) discusses, in the first quarter of the eighteenth century, westerwald stoneware jugs were being stamped with either an “AR,” Queen Anne (1702-1714) or “GR,” King George I (1714-1727) and King George II (1727-1760). While the presence of royal stamped initials, dates the westerwald assemblage on Historic Huguenot Street after the seventeenth century, its presence raises noteworthy questions. Firstly, concerning the sociotechnic realm, we see that even decades into settlement in the area, the Huguenots were maintaining ties to the Rhineland-Palatinate, the historic area of westerwald stoneware production and their area of settlement after fleeing France. While we do not know if they acquired these specific vessels from Dutch traders who were responsible for circulating westerwald stoneware until the American revolution, or traded for them with local British colonists, their presence adds to the complex history of colonial drinking and trade patterns (Noël Hume, 1970:283).

Concerning the ideotechnic realm, one can postulate if the Huguenot families of New Paltz and their descendants felt a sense of fealty to Queen Anne, George I and George I’s son George II. In ruling the United Kingdom from 1707 to 1760 in an unbroken chain of succession, they turned the country into a safe-haven for protestant refugees. With over 50,000 Huguenots settling in the United Kingdom by the turn of the seventeenth century, it was Queen Anne who enacted the Foreign Protestants Naturalization Act 1708 (Musée Protestant, 2019). This act gave rights of citizenship to all foreign protestants in the United Kingdom, among the beneficiaries of whom were Huguenots fleeing the Rhineland-Palatinate shortly after the start of the Nine Years’ War in

1688. Thus, while not certain, the presence of westerwald stoneware could signify a historically rooted Huguenot affiliation with the English Crown that permeated into Colonial America.



**Figure 9: *Bartmannkrug* sherds from Huguenot Street.**



**Figure 10: Westerwald sherds from Huguenot Street.**

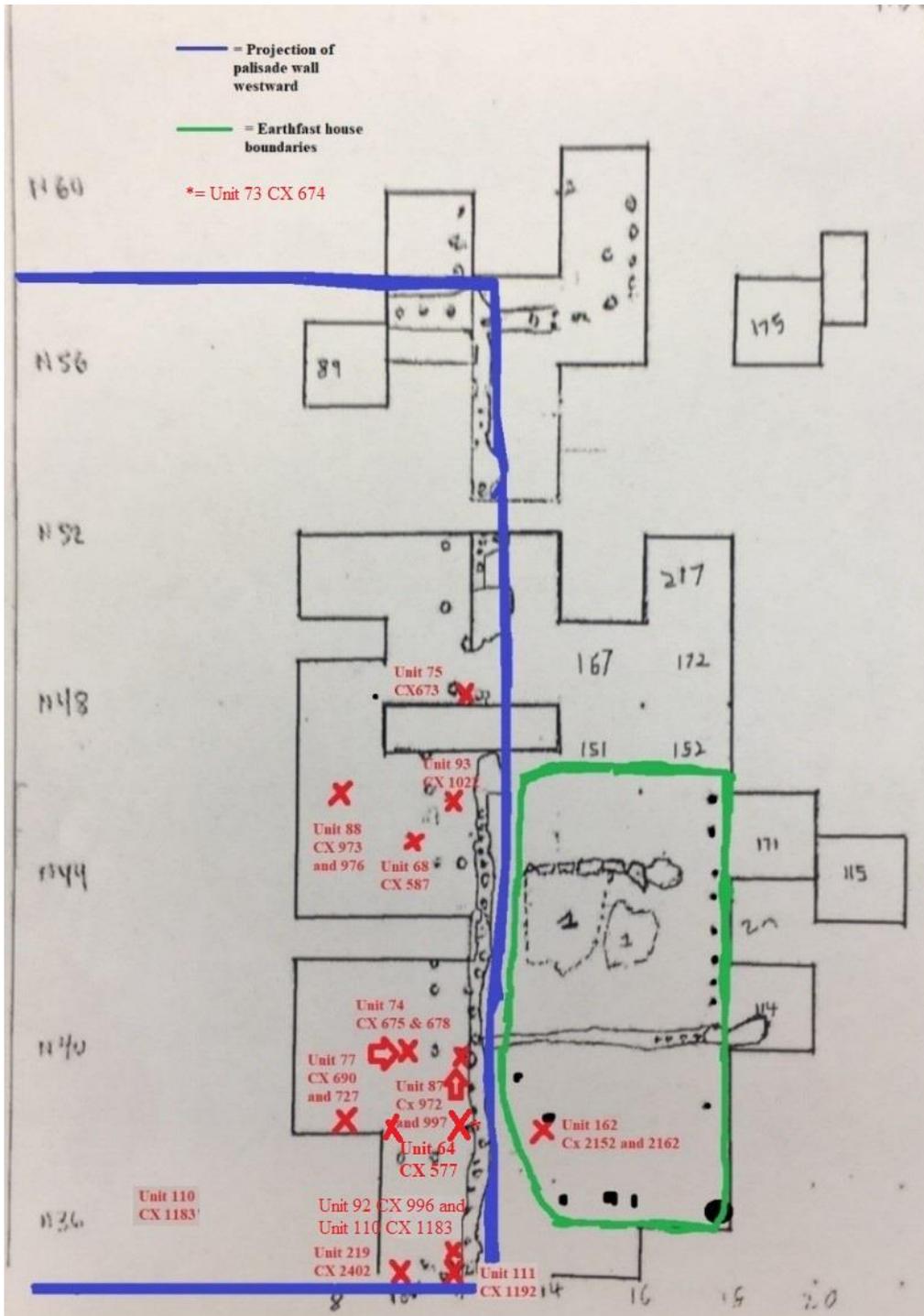


Figure 11: Black glass provenience on Bevier-Elting Lawn.

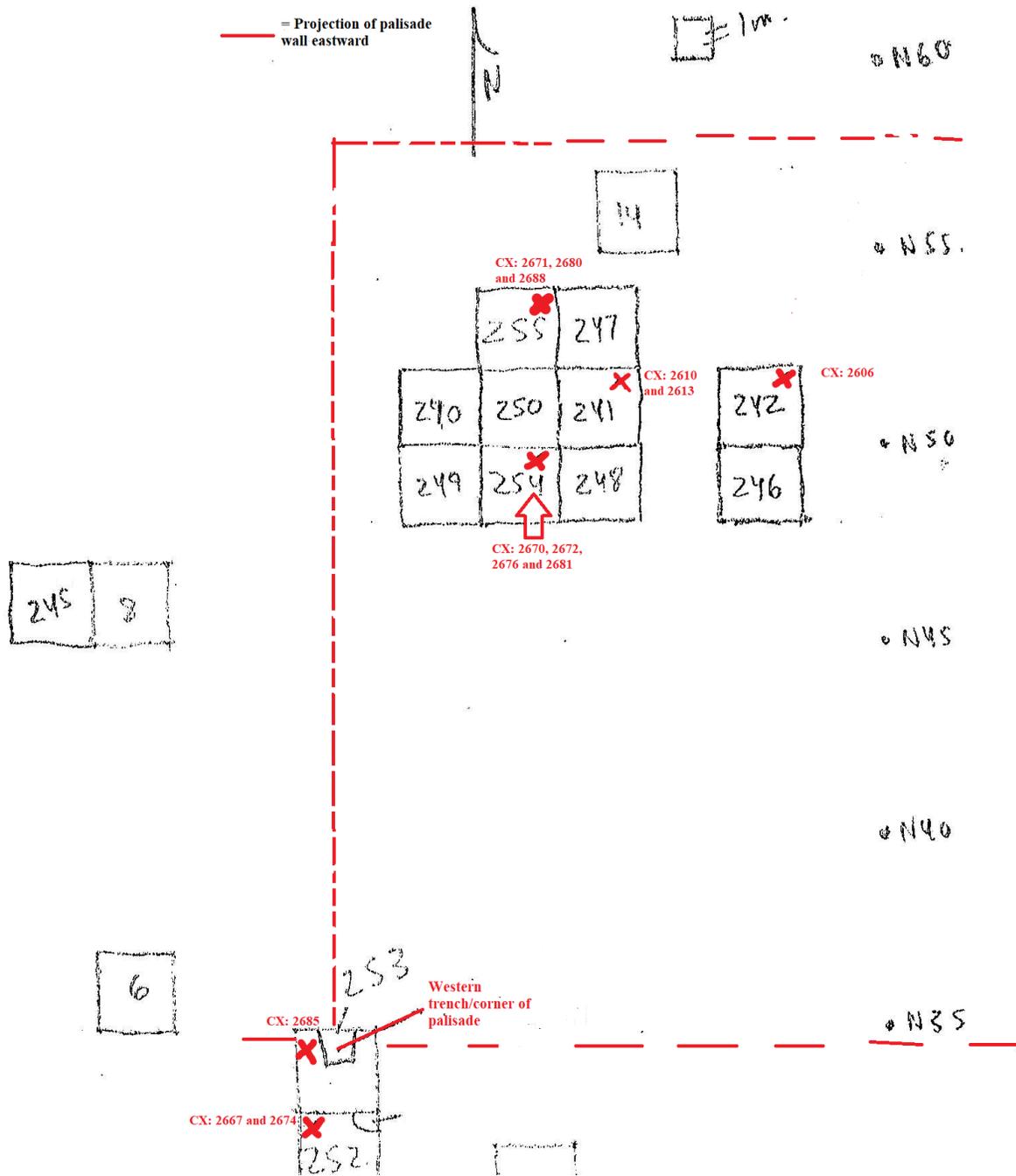


Figure 12: Black Glass Provenience at Western Portion of Palisade.

### Conclusion

The analysis of black glass wine bottle sherds at Historic Huguenot Street highlights the tumultuous lives lead by the original twelve Huguenot families who settled in New Paltz, NY. The choice to lead relatively isolated lives in relation to other notable colonial settlements is reflected through the presence of only ninety-one individual sherds which constitute five unique vessels, indicating a lack of tavern culture. Furthermore, in classifying the sherds into Binford's categories all of them fall into the technomic sphere, highlighting an emphasis on survival, with little attention allocated towards luxuries, such as wine bottles with crests or the owner's initials stamped on the bottle. However, when turning to an analysis of the individual sherd's provenience it looks like there occurred an increase in social drinking after the earthfast house's abandonment, in exchange for the safety of the palisaded stockade.

Out of the 91 sherds of black glass wine bottles analyzed, 67 sherds, or 74 percent of the total sample were found inside the palisade's historic boundaries, leaving 24 sherds outside of the palisade's confines. The notion of the palisade as increasing social drinking, with the safety it provided these early Huguenots, is reinforced by an almost even split in sherd distribution between the eastern and western ends of the palisade, with 36 sherds in the eastern side and 31 coming from the western side. As such, the black wine glass assemblage at Historic Huguenot Street reflects the broader socio-cultural and political lives of the early Huguenots, who fleeing religious persecution lived a life focused on survival on the frontier, gradually engaging in more social drinking as they settled into the area and the safety of the palisade.

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